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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/994,651 | 11/28/2001 | Daisuke Shibai | 0425-0866P | 7708 |
| 2292 | 7590 | 12/22/2003 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | ZALUKAEVA, TATYANA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1713 | |

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/994,651

Applicant(s)

SHIBAI ET AL.

Examiner

Tatyana Zalukaeva

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-10 and 13-20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

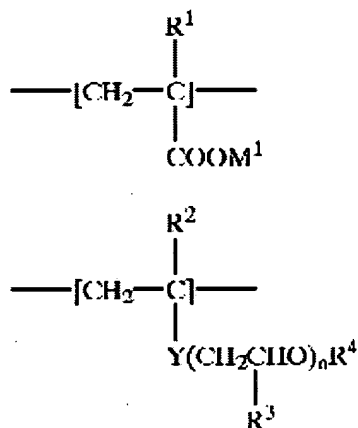
- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. In Paper No. 9, Applicants amended claims 1, 3 and added new claims 13-20.
2. Rejections under 35 USC112, second paragraph are overcome by Applicants amendment.
3. Receipt is acknowledged of papers, including certified translation of foreign priority documents submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1-10 stand rejected and new claims 13-30 are under 35 U.S.C. 102(e) as being anticipated by Isomura et al (U.S. 6,437,027).

Isomura discloses powdery dispersant for preparing hydraulic compositions (abstract) which is obtained from a copolymer that is a(meth)acrylate polymer having polyalkylene glycol chain (col. 2, lines 60-65). Of the aforementioned copolymers, preferable ones are acrylate or methacrylate polymer compounds comprising at least two different structural units represented by the following formulas (1) and (2) (col. 3, lines 21-25):

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wherein the meaning of all substitute groups and the amounts of these groups are clearly the same as instantly claimed (see col. 3, lines 40-55).

More preferable (meth)acrylate copolymers (A) are (meth)acrylate copolymers having a number average molecular weight of 2,000-50,000, which comprise structural unit (5) represented by the following formula (5) in an amount of 40-70 mol %, structural unit (6) represented by the following formula (6) in an amount of 5-30 mol %, structural unit (7) represented by the following formula (7) in an amount of 1-20 mol %, structural unit (8) represented by the following formula (8) in an amount of 1-30 mol %, and structural unit (9) represented by the following formula (9) in an amount of 1-30 mol %: (col. 4, lines 45-65 – col. 5, lines 1-50). This specifically read on the instant claims 1-4, 13, 14. With regard to number of oxyalkylene groups, Isomura teaches the ranges as instantly claimed in col. 3, lines 14-20. With regard to claim 9, Isomura teaches that obtained powder was crushed by means of a crusher (type MCG 180, product of Matsubara), to thereby prepare powdery cement dispersants (1) and (2) having a particle size of 50-500 μm as shown in Table 7.

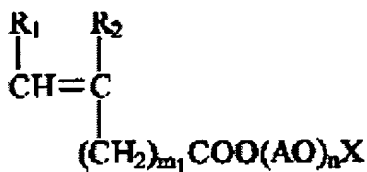
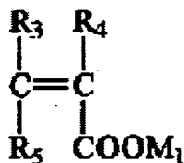
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Therefore, all the limitations of the instant claims are met by the disclosure of Isomura.

6. Claims 1-8 stand rejected under 35 U.S.C. 102(b) as being anticipated by JP 2000103660.

JP'660 discloses a copolymer prepared by polymerizing a monomer mixture mainly comprising two monomers as main components.

The monomer mixture contains a monomer represented by formula I, and one or more kinds of monomers represented by formula II as main components.



R1 and R2 are each H or a methyl group; m1 is an integer of 0-2;

AO is an oxyalkylene group of 2-3 carbon atoms; n is a number of 2-300; X is H or an alkyl group of 1-3 carbon atoms. In the formulas II and III, R4 and R5 are each H, a methyl group or the like; M1, M2 and Y are each H, an alkali metal, alkaline earth metal,

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ammonium or the like; m2 is an integer of 0-2. Monomers of formula (C) can also be present (see abstract).

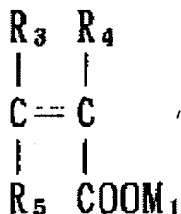
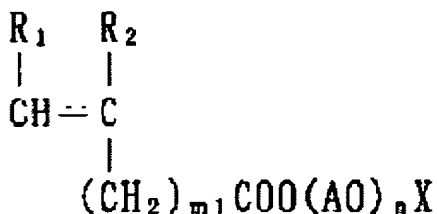
7. Claims 1-8 stand rejected under 35 U.S.C. 102(b) as being anticipated by JP 2000044309.

JP'309 discloses an additive capable of imparting fluidity and fluidity-keeping properties to fine aggregates produced at any place by including a vinyl- based polymer having an oxyalkylene group having specific numbers of carbons in a molecule, and a specified average molecular weight. This additive comprises a vinyl-based polymer having a 2-3C oxyalkylene group in a molecule, and 500-500,000 numberaverage molecular weight (e.g. methanol-EO-monoester of methacrylic acid/Na acrylate), and a cationic compound having a tertiary N atom.

8. Claims 1-8 stand rejected under 35 U.S.C. 102(b) as being clearly anticipated and by JP 09328345.

JP'345 discloses an admixture for concrete improving by of a copolymer, a high quality water reducing agent, a water-soluble polymer and a defoaming agent, with a specific molar ratio of monomers forming the copolymer and the average molecular weight of the copolymer. The copolymer is obtained by copolymerizing monomers of formula I and II.

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The molar ratio of the monomer of formula I to that of formula II is (1/90) to (50/50). A weight average molecular weight (measured by a gel- permeation chromatography method and reduced to a sodium polystyrenesulfonate) is 3,000-200,000. An aromatic water reducing agent is used as the high quality water reducing agent. A polyalkylene glycol derivative is used as the water-soluble polymer. A product having an excellent surface appearance is obtained by using the admixture for the concrete.

9. Claims 1-8 stand rejected under 35 U.S.C. 102(b) as being anticipated by JP 2000086315.

JP'315 discloses an additive combined having a high flowability-imparting property to hydraulic compositions and an improved clay viscosity-imparting property, satisfying a standard strength, and useful for the hydraulic compositions.

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This additive for hydraulic compositions comprises a copolymer having two major comonomers (A) and (B) in a weight ratio of 5/95 to 95/5. A vinylic copolymer containing 2-3C polyoxyalkylene groups (average addition mole number: 2-300) in the molecule and having a weight-average mol.wt. of 5,000-500,000. A polymer having a mol.wt. of 1,000-20,000 and prepared by copolymerizing one or more monomers of the formula (A) and formula (B), wherein R1 is hydrogen atom or methyl group; R2, R3 are each hydrogen atom, methyl group or $M_2O(CO)(CH_2)m_1$; M1, M2 are each hydrogen atom, an alkali metal, an alkaline earth metal, ammonium, or a mono-, di- or tri-alkylammonium which may be substituted by a hydroxyl group; (m1) is an integer of 0-2. (see abstract).

10. Claim 9 stands rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over anyone of the above recited Japanese patents, each one individually..

As for the limitation of claim 9 on the particle size of resulting powder, the rejection is made in the sense of The above rejections were made in the sense of Fitzgerald (205 USPQ 594). (CAFC) based on presumption that the properties governing the claimed compositions, if not taught, may be very well met by the compositions of JP patents, since the compositions of of these JP references are essentially the same and made in essentially the same manner as applicants' compositions, wherein the burden to show that it is not the case is shifted to applicants; or in the sense of In re Spada, 911 F 2d 705, 709 15 USPQ 1655, 1658 (Fed. Cir. 1990), which settles that when the claimed

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compositions are not novel, they are not rendered patentable by recitation of properties, whether or not these properties are shown or suggested in prior art.

11. In addition claims 1-10 and 13-20 are rejected under 35 U.S.C. 102(a) as being anticipated by JP 20026146.

JP'146 discloses powdered cement dispersant containing a polycarboxylic acid based high molecular compound, powder preferably has 5-2,000 μm average particle diameter. The polycarboxylic acid type high molecular compd. is preferably a (meth)acrylic acid or maleic acid copolymer having a number average mol.wt. of about 2,000-50,000.(abstract). The possible structural units of a polymer are shown in col.3, lines 23-40. , col. 5 and 6 .

Response to Arguments

12. Applicant's arguments filed October 08, 2003 have been fully considered but they are not persuasive.

With regard to **Isomura reference**, Applicants arguments reside in contention that Isomura "merely discloses a mixture of a polycarboxylate polymer compound having a polyalkylene glycol chain and a reducing agent". Applicants further state that "there is no disclosure of **all** features as instantly claimed".

This is not found persuasive. In the previous Office Action on the merits that is incorporated herein in its entirety, Examiner clearly showed how **all** the features of the

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instant claims are presented in Isomura. Applicants failed to show as to what specific features are allegedly not disclosed by Isomura.

With regard to rejections over JP'660, JP'309 and JP'315, Applicants provide unsupported statement that the above Japanese references fail to disclose all features as instantly claimed. Once again, Applicants failed to show what are those features of the instant claims that are not disclosed by the Japanese references applied by the Examiner.

13. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 10/08/2003 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (703) 308-8819. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703) 305-2450. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.


Tatyana Zalukaeva, Ph.D.
Primary Examiner
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December 17, 2003